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ART. VII.—*On the Mountainous Country, the portion of Asher, between the Coasts of Tyre and Sidon, and the Jordan. By CAPTAIN NEWBOLD, F.R.S., For Member of the Philomathique and Geological Societies of Paris, &c.*

[Read February 20, 1847.]

THE mountainous country lying between the coasts of Tyre and Sidon and the valley of the Jordan presents almost a complete blank, even in our latest maps of Palestine. Nau (A.D. 1674) went from the mouth of the Kasimiyeh river to Safed; Buckingham (A.D. 1816), from Banias to Sidon; Ven Monro (A.D. 1833) went from Safed to Tyre; and my friend Mr. Thomson, the American missionary of Beyrút, took a somewhat similar route in 1837. In 1835, Mr. Smith passed from the Húleh, through Merj Ayún, to Jezzin, and subsequently (1838), in company with Professor Robinson, from Safed to Tyre.

The last intelligent travellers, however, appear to have passed through this interesting country with less attention than they usually bestowed on other parts of Palestine. Professor Robinson explains the circumstance, and their regret, in the following terms¹:—"In proceeding from Safed to Tyre, and thence by Sidon to Beirút, we supposed that we were about to travel a beaten track, which had been repeatedly described, and could therefore present nothing of novelty, whatever there might be of interest, connected with the renowned emporiums of ancient Phœnicia. Under the influence of this impression, and feeling that our work was done, I am sorry to say we paid a less exact attention to our course, and to the various objects along the way, than had hitherto been our custom. I regret this the more, because it turns out that the country between Safed and Tyre was altogether unknown; and even the route along the coast between Tyre and Beirút, although often travelled, has never been accurately described."

My own routes, in 1845, lay from Tyre, by the Castle of Maron and the head of the Lake Húleh, to Banias, and back from Hasbeia and the Castle of Esh Shukíf to Sidon. My shore route extended from St. Jean d'Acre, by Tyre, to Sidon.

In adverting to Mr. Smith's valuable catalogue, in Arabic and

¹ Vol. III., pp. 365, 366.

English, of places in Palestine, I find that lists of the villages of the Bellád Besháreh and Esh Shukíf districts, as well as of those of the coasts of Tyre and Sidon, of Yafa and Haifa, are yet wanting to complete the survey of Palestine Proper. During my trip, I was fortunate enough to supply, in some measure, this deficiency as regards the two first of these districts and the coasts of Tyre and Sidon; though the lists are by no means complete. They were obtained from various Sheikhs, and checked by mutual comparison.

I shall now proceed to give a general outline of the country under description.

Modern Division and Boundaries.—It is divided into two large districts, the northernmost of which is called the Bellád esh Shukíf بلاد الشقيف، and the southernmost Bellád Besháreh ببلاد بيشاره. Each of these districts is divided into its maritime and inland or mountainous tracts, distinguished by the significant terms Sahal and Jebel—سهل و جبل.

The Bellád esh Shukíf is bounded on the

- N. by the Lebanon district of Aklím et Tuffa,
- S. by Bellád Besháreh,
- E. by Bellád Besháreh and Merj el Ayún, } Separated by Litáni or Kasimiyeh river.
- W. by Mediterranean.

The Bellád Besháreh is bounded on the

- N. by Bellád esh Shukíf,
- S. by the districts of Acca (Acre), Safed, and El Jebel,
- E. by the Ard el Húleh and Hasbeia district,
- W. by the Mediterranean.

The Merj el Ayún (the Plain of the Springs) is a subdivision of Bellád Besháreh, situate on its N.E. angle.

Area and Aspect.—These districts comprehend an area of about 468 square miles. Their average length from N. to S. is about 26 miles; and average breadth from E. to W. about 18 miles. The shore districts, comprising the celebrated Phoenician plain, rarely exceed 2 miles in breadth. In many places, as at Ras el Abiad, Promontorium Album, and Ras en Nakúra, the mountains come down in bold precipices to the sea.

Physical Aspect.—The general aspect of the maritime tract is that of an interrupted undulating plain; and of the inland districts that of an irregular table-land or plateau, separated by deep narrow wadis or valleys, and studded with hilly elevations. The approximate average

elevation above the level of the sea cannot exceed 2000 feet; while that of the seaboard varies from a few feet to 300 feet. The mountainous region attains an approximate maximum elevation, in its northern portions, of about 4500 feet. It is formed by the southerly continuation of the Libanus and Anti-Libanus chains, which almost unite in the elevated plain of Merj el Ayún, being separated only by the deep and narrow gorge of the Litáni, in which the broad valley of the Bekaa (Cœlo-Syria) tails off southerly and westerly to the Mediterranean.

The Lebanon line of elevation does not cease, as often supposed, in the vicinity of Acre and Nazareth; but is continued, with some dislocations, through Judea, and east of Gaza, into the deserts of Egypt, whence it may be still traced, though occasionally indistinct, into the wastes of Lybia.

The mountainous land does not rise in regular terraces from the coast, but by irregularly sloping elevations. Their external configuration more approaches the undulating and tabular than the indented or pinnacled. The general line of elevation runs nearly S. 10° W. The general slope to the Mediterranean is from 3° to 4° ; that to the Jordan, on the east, has a greater inclination.

Valleys and Rivers.—There is no longitudinal valley, properly so called, which separates this mountain tract throughout the whole of its extent. Those of El Kham and the Litáni, to the west of the Merj el Ayún, and Wadi el Ujayer, are the most considerable.

The transverse valleys are numerous and remarkable, being in general extremely deep, narrow, and with precipitous sides. The valley of the Litáni, after running nearly S. by W. for the greater part of its course, terminates in a transverse valley, a little above the latitude of Tyre, and thence runs, zigzagging, W. by N. to the sea. It forms a tremendous gorgo, nearly 1000 feet deep. These transverse cracks in the strata constitute the principal drainage lines by which the water is carried off, westward to the sea, and eastward into the basin of the Jordan.

The principal river running to the sea is the Litáni, just mentioned, and the Nahr ez Zahráni. The first has its rise near Anjar, in the vicinity of Baalbec; thence, after draining the valley of Cœlo-Syria, it enters Bellad Besháreh at its N. E. angle, near the Merj el Ayún, and takes the name of Kasimíyah (signifying a separator) to the sea, where it debouches about 4 miles northerly from Tyre. This river is about the size of the Dove. Slow and sluggish in the valley of the Bekaa, it has here all the characteristics of a mountain stream; below the Castle of Shukíf it presented, in the month of May, a rapid

torrent of turbid water, nearly white from the abrasion of the chalky cliffs, 25 paces broad, and quite unfordable. It was crossed by a stone bridge of two arches, slightly pointed, 62 paces long by 4 broad; this bridge was called Jesr Kherdeli by my muleteer. Above the bridge the stream was broken by several small islets. The remains of a guard-tower stood on the left bank. Near the coast the Kasimíeh finds its way to the sea through a low belt of sand, in a meandering stream of considerable depth, and 7 paces broad; it is there crossed by a good bridge of one arch. This river is the ancient Leontes.

The Zahráni زهرانی is a stream about one-third the size of the Kasimíeh, and is generally fordable. It has its rise in the hills near Jezzin, about 13 miles direct distance easterly from Sidon, from which town its embouchure lies about 4 miles S. by W. Its bed among the mountains is often literally concealed amid luxuriant bouquets of the pink-flowering oleander. Its general course is nearly west.

The drainage easterly is carried to the Jordan and Lake Húleh by numerous small rivulets, among which that of Zák is the most considerable.

Geology.—The principal rock spreading over this part of Palestine is the marine limestone of Lebanon, interstratified with beds of scaglia, marl, and calcareous sandstone. Organic remains are rarer here than in the Lebanon; but they exist in sufficient number to identify the two formations. Flint and chert occur in layers, and geodes of quartz abound in the marly beds.

These strata have been penetrated and altered by dykes of basalt, both cellular like that of the Houran, and compact.

This volcanic rock is seldom seen in the tracts under description, except in or near lines of dislocation or fracture—phenomena with which it appears to be intimately connected, as well as with the fearful earthquakes by which the crust of the Holy Land has been rent from the time of the catastrophe of Sodom and Gomorrah, and the Crucifixion, up to the present hour. Midway down, and at the bottom of the great fissure of the Litáni, below the Castle of Shukif on the left side, below the village of Ulich, a great outburst of trap occurs, overlaid by the friable red and variegated sandstone with which it is often associated in the Lebanon.

Considerable dislocation of the strata occurs in the line of this great transverse fissure. On the southern bank of the river are seen cliffs of the red sandstone, while the limestone occupies a similar and much greater height on the opposite side.

A few miles to the south of this region, in the direction of Safed, Messrs. Robinson and Smith¹ noticed, in the high open plain near Kadita, heaps of black stones and lava surrounding what had evidently been once the crater of a volcano. They describe it as an oval basin sunk in the plain, in the direction from S.W. by S. to N.W. by N., between 300 and 400 feet in length, and about 120 feet in breadth; the depth about 40 feet. The sides are of lava, shelving, but steep and rugged: in them Mr. Hebard recognised lavas of three different epochs. A sort of outlet occurs in the N.W. side. The basin is sometimes filled with water, but then it contained nothing but mud. All around it are the traces of its former action exhibited in the strata of lava and the vast masses of volcanic stones.

The valley of the Jordan, on the east skirts of this district, above the Lake Húleh, I found to be almost entirely composed of alluvial deposit, resting on rugged coulées of basalt, in which the Lake Húleh itself probably occupies a great engulfment or sinking-in.

The volcanic action on the limestone has produced a vast quantity of calcedonies, agates, jaspers, and cherts, in the vicinity of these outbursts. Silicified wood is seen occasionally in the sandstone, associated with the basalt.

The limestone in the vicinity of the sea is often overlaid by beds of conglomerate, formed of pebbles, rounded and angular, derived from the harder and more siliceous portions of the limestone, and a few pebbles of basalt, cemented by a travertin-like paste. These beds rarely extend any great distance inland; they are occasionally found at 300 or 400 feet above the sea's level. One of the most considerable of these deposits is found to the north of Ras en Nákúreh. The beds are generally horizontal. The dip of the limestone strata is usually westerly, though various and confused from volcanic disturbance; sometimes the strata are nearly horizontal, at others vertical. At Ras en Nakúreh the dip was 6° westerly.

Soil.—The soil covering these rocks is usually of a light reddish brown, varying generally with the nature of the subjacent rock; redder and more ferruginous where the basalt outcrops, whiter and more marly in the vicinity of the scaglia limestone. A fine sheet of dark vegetable mould covers the maritime plain north of Ras el Abiad.

The Merj el Ayún is for the most part a plateau of limestone, on which rests a rich red loam, smiling with vineyards, gardens, and wheat-fields; the vine thrives also in the marly soils, but still better

¹ Vol. III., pp. 367, 368.

in the red volcanic soils. The dark vegetable loam is the best calculated for the culture of cotton. Wheat, millet, beans, tobacco, and lentils (*addas*) are the staple articles of cultivation, both in the low plains and the high plateaus. The vine and olive flourish on the high plains and mountain sides; a little cotton is grown in the low maritime tracts.

The table-lands are generally naked of trees, but on the loftiest summits are found the juniper and pine. The high valleys and mountain sides are verdant with the evergreen oak (*andrachnes*); the terebinth and carob trees, oleanders, and the Oriental plane, shade the streams; while the low maritime tracts abound with salsolas, squills, and anemones.

Government.—These districts are under the Turkish Pasha of Sidon, whose present residence is Beyrút; but the immediate chief of Bellád esh Shukif is Hussain Amin, of the house or tribe of Beit Ali, who resides at Nabatieh et Tahta. The chiefs of Bellád Besháreh and the Merj el Ayún are Hamed el Bey and Hussan Selman, who resides at Tibnín. They are all Metáwali of high descent. The villages are separately under their respective Sheikhs, who are responsible to these chiefs, and the latter to the Pasha, for their several districts.

Population.—By far the greater part of the population is Metáwali, a sect of Shiites, intermingled with Greek, Greek Catholic, and Maronite Christians, and also a few Druses and Arab Mussulmans of the Sunni sect. The prevailing character of the population is marked, in the list appended, by the letters M, C, D, A, for Metáwali, Christian, Druse, and Arab, prefixed to the name of the village.

The approximate total population, as far as could be gleaned from the imperfect account of some of the Sheikhs, amounts only to 15,000, or little more than 30 to the square mile; that of the whole of Syria, calculated at 1,500,000 souls, amounts to about the same per square mile.

The towns of Tyre and Sidon are under separate Mútsellims, quite distinct from the Metáwali chiefs of districts. The present approximate population of Tyre amounts to about 4100 souls, of whom about

2000	are Greek Catholics
50	,, Greeks
50	,, Maronites
2000	,, Metáwali.

The approximate population of Sidon is greater than that of Tyre, viz.:—

Mussulmans ....	....	....	....	3500
Greek Catholics ....	....	....	....	2000
Greeks (Rúmí) ....	....	....	....	40
Maronites ....	....	....	....	1200
Jews ....	....	....	....	400
Latins ....	....	....	....	50
Metáwali ....	....	....	....	20
Floating (Sailors, &c.)	....	....	....	400
				7610

The principal export from Tyre and Sidon at the present day is tobacco—an article of commerce unknown in the palmy days of these once greatest maritime cities of the world: fruits, honey, silk, cotton, timber, firwood, and nut-galls, are also articles of export. Beyrút has latterly taken away much of the trade of Sidon. The crimsons and purples of Tyre no longer exist, though the shell producing the dye is found on the coast. I examined carefully the cavities, taken by Mr. Wylde for the dye-pots of the Tyrians, close to the sea, and find them to be natural rock basins in the rugged limestone rock, excavated by the action of the tide. They occur in various places along the whole coast of Syria, from the mouth of the Orontes to Gaza. The tidal wave washes into these cavities fragments of shells and sand, which, in process of time, become cemented into a breccia by the chemical action of the sea-water salts on the limestone. The shells are not confined to the species producing the dye, but consist indiscriminately of all shells that may happen to fall within the reach of the wave.

I took a boat to visit the submerged ruins of Tyre described by M. Berton; but found only a reef of the rugged limestone of the coast. There can, however, be no question that the surface of the peninsula has been subject to oscillation, as is evident from the numerous columns and foundations that are now covered by the sea, at a distance of several paces from the shore, particularly on the southern and western extremities of the peninsula, “destroyed in the midst of the sea.” But by far the greater portion of the old city lies buried under the drift sands, a little to the east of the present town; it forms an inexhaustible quarry, whence materials are taken to build and increase Beyrút, and other towns on the coast. A magnificent wall of finely-cut rusticated masonry, which appears to have crossed the peninsula from north to south, has lately been discovered under

the sands. The modern Tyrians were busily engaged in transporting the materials of this portion of their ancient city to repair the breaches made by Sir R. Stopford and Commodore Napier in the walls of St. Jean d'Acre.

"Is this your joyous city, whose antiquity is of ancient days? Her own feet shall carry her afar off to sojourn." (Isaiah xxiii. 7.) "They shall lay thy stones, and thy timber, and thy dust in the midst of the water." (Ezek. xxvi. 12.)

In the vicinity, the remains of baths with tessellated pavements, and the foundations and pillars of a small temple, had been recently dug up, as well as the mutilated torso of a marble statue of Minerva, as large as life; the drapery is exquisitely done, and is confined on the bosom by a Medusa's head. This piece of statuary is in possession of a native of Tyre, living in the house called Beit Jubbár. I mentioned the circumstance to Colonel Rose and to Mr. Moore, our Consul at Beyrút, and hope that this interesting relic of Grecian art in Tyre may be preserved from still further mutilation.

Of Christian Tyre there still remain the ruins of a fine cathedral, supposed by Maundrell to be the structure erected by Paulinus, Bishop of Tyre, in the commencement of the fourth century, for which Eusebius, who describes it as the most splendid of all the temples in Phœnicia, wrote a consecration sermon. Here probably, as Robinson and Smith observe, were entombed the bones of the Emperor Frederick Barbarossa, drowned in the Calycadnus on his march to the Holy Land, 1190 A.D. Robinson and Smith judged the length of this structure to have been not less than 250 feet, and its height 150. I availed myself of a better opportunity than these travellers possessed of measuring it both from the inside, and also from the exterior, by going round through the gate of the Turkish wall, and found it to measure 216 feet by 132 feet. Part of the Bema on the east side is still standing: the height and massiveness of the walls, and the large prostrate pillars of granite, proclaim this structure to have been one of the most magnificent cathedrals of Syria.

Of ancient Sidon little remains save her rock tombs, and the numerous pillars of granite and marble seen scattered in all parts of the town.

"Be thou ashamed, O Zidon, for the sea hath spoken, even the strength of the sea." (Isaiah xxiii. 4.) "Son of man, set thy face against Zidon, and prophesy against it." (Ezekiel xxviii. 21.)

Remarkable places in the interior.—Among the most remarkable places in the mountain districts are the castles of Tibnín, Húnin, Shemmaa, and Márón, in Bellád Besháreh; and that of Shukíf, in

Bellád Shukíf. That of Húnín protected the eastern entrance of the country from Banias and the valley of the Jordan ; that of Shemmaa, which stands on a lofty mountain overlooking Ras el Abiad, held the key of the maritime pass from the south ; Márón guarded the pass east from Tyre ; while the strong fortresses of Tibnín and Shukíf held in subjection the high fertile intervening table-lands.

Tibnín is the Toron of the Crusades, built, according to William of Tyre, A.D. 1107, by the Christian chief of Tiberias, Hugh of St. Omer. Saladin took it after a siege of six days, A.D. 1187, after his fatal victory over the Crusaders at Hattin. In 1197-8 it was besieged for nearly two months by the Duke of Brabant without success, though it subsequently came into the possession of the Christians, but finally surrendered to Bibars, A.D. 1266. Nau passed by in 1674, Robinson and Smith in 1838, but these travellers did not visit the castle.

The castle of Shukíf figures in the history of the Crusades under the name of Belfort or Beaufort, and gives its ancient Arabic name to the district. Here the Christian knights, after their repulse by Saladin at Banias, fled for refuge, trusting to its prodigious strength. The place did not fall into the hands of their victor until A.D. 1189, when it was surrendered, on honourable terms, by Raynald of Sidon, the garrison retiring unmolested. It was restored A.D. 1240, but retaken in A.D. 1268 by Bibars after a determined resistance on the part of the Templars. No mention of this fortress occurs after the time of Ed Dhahiri, till Burckhardt heard of it in A.D. 1810. Mr. Buckingham passed near it *en route* from Banias to Sidon ; and Messrs. Robinson and Smith saw it at a considerable distance when passing from Safed to Tyre. I visited it *en route* from Hasbeia to Sidon in 1846, and passed the night at the adjacent village of Arnún, whence the fortress is called by Abulfeda, "Esh Shukíf Arnún." The village is 20 minutes walk N. 20° W. on the table-land below the castle. The latter stands on the edge of a precipice, nearly 1000 feet above the Litáni, which roars in the depth of the gorge at the base of this fearful scarp, on its right or western bank. The castle is a mass of dilapidated masonry in the style of the middle ages, running N.E. and S.W., about 160 paces long, and from 50 to 55 paces broad. On the S.E. side the wall rises in a line with the rock from the brink of the precipice, and is defended on the other flanks by a deep fosse excavated in the rock. The entrance appears to have been on the S.W. side, but is now blocked up by rubbish. The slide of the portcullis, a turret and passage for drawing up letters from below still remain. The wall is from 7 to 15 feet thick, loop-holed in various places, and

flanked by both square and round towers; the latter are of rusticated masonry with bases shaped like truncated cones. On the S.E. side the wall is double, and here are many out offices, stables, souterrains, and a rock-cut cistern. There is also a cistern on the opposite side, and out beyond the ditch the remains of a small town, evidently used by the vassals and retainers of the castle. Near the S. angle, are three grottos, excavated in the rock, and in front of the entrance runs an elevated terrace. The interior presents heaps of ruins, among which still stands the hall of audience, a massive building with a handsome arched entrance, and a groined roof supported by octangular pillars; the apartment is about 30 feet by 20 feet. Near the castle are the remains of two old watch towers.

I entered the castle with some difficulty by an intricate passage leading up a tower on the S. angle. The conical knoll which it crowns rises about 200 feet above the surface of the high plateau to the N. Messrs. Robinson and Smith appear to have been misinformed in stating the castle to be the residence of the Metáwali Sheikhs of the district¹; it has been totally deserted for many years save occasionally by wandering tribes of Naners (Gypsies). The Sheikhs probably once resided at the village of Arnún.

Kalaat esh Shukíf has been erroneously placed in Robinson and Smith's map several miles to the N.E. of its true position. M. Kiepert, who constructed the map, appears fully sensible of the difficulties he had to encounter in laying down this part of Palestine from these travellers' observations, as will appear from his memoir on the map.² The want of exactness in the notation of the course has caused a deviation which would place Safed four or five minutes farther east than is possible according to Jacotin's map, or according to the more southern routes of these travellers themselves. Unfortunately, this uncertainty, M. Kiepert goes on to say, affects also the important position of Kalaat esh Shukíf; in this, however, the American travellers are not to blame, for I have every reason to believe that their bearing taken from Haddáta is correct, but am ignorant of the authority on which M. Kiepert has placed Esh Shukíf at so great a distance in the line of this bearing, to the N. 40° E. of Haddáta. My own routes, and more especially the intersection of my own bearing of Esh Shukif, (taken at Banias and afterwards verified at Shukíf itself,) with that of Messrs. Robinson and Smith from Haddáta, would place it, as before said, several miles nearer the latter place. Esh Shukíf I found to

¹ Vol. III., pp. 376, 377.

² Appendix B (Bib. Res.), p. 51.

bear W. 1° N. from the castle of Banias; the instrument used was a prismatic surveying compass, by Troughton and Simms. The course of the Litáni too appears too far to the south.

The castle of Márón stands on a hill about 300 feet high, commanding the pass of Wadi Buflye, about 10 miles easterly from Tyre. It consists of a wall of solid masonry from 15 to 20 feet high, flanked by semicircular towers, comprising an area of about 198 paces long, and from 62 to 95 broad; the entrance is on the N.W. side, and is provided with a slide for a portcullis; the area inside is occupied partly by ruins and partly by the huts of a small village. The castle appears never to have been finished; the style is that of the Crusades. This Márón is not to be confounded with that to the S.E., on the road from Safed to Tyre.

Ancient Geography.—The districts under description formed part of the territory allotted to Canaan, one of the sons of Ham. On the division of the Promised Land in the time of Joshua, this part of Canaan, from the Great Sidon on the north to Mount Carmel on the south, fell to the tribe of Asher¹; while the eastern tracts, on the western banks of the Jordan, became the portion of Zebulon and Naphthali. “Neither did Asher drive out the inhabitants of Accho, nor the inhabitants of Sidon, nor of Ahlab, nor of Achzib, nor of Helbah, nor of Aphek, nor of Rehob.” (Judges i. 31.)

In David's reign, Tyre appears as a maritime kingdom, under Hiram². After the rebellion of the ten tribes, and their being carried away into captivity by the King of Assyria, the provinces belonging to Asher in the interior were comprehended in Galilee, and the maritime tracts remained separate, under the name of the Coasts of Tyre and Sidon.

Sidon, the first-born of Canaan, gave his name to the city he founded, and of which Tyre was a colony. The first mention of Tyre occurs in the Book of Joshua as belonging to Asher³. Isaiah⁴ significantly styles this great city the “daughter of Zidon.” Homer is silent respecting Tyre, though the immortal bard notices Sidon more than once in both Iliad and Odyssey⁵.

These two great cities are easily recognised throughout the revolutions of ages in the present Sûr and Saida. Accho, Achzib (Ecdippa), Alexandroschenô, and Zarephath or Sarepta on the coast, have been found in the present Acca (Acre), Ez Zib, Iskandriyeh, and

¹ Joshua xix. 16—39.

² Chronicles xiv. 1.

³ Joshua xix. 29.

⁴ Isaiah xxiii. 12.

⁵ Iliad vi. 289, and xxiii. 743; Odyss. iv. 54, and xv. 114.

Surafend; while the remains at Adlán are supposed to mark the site of the small city of Ornithopolis. Kánah is doubtless the Kaneh of the Book of Joshua; its Arabic orthography قانه in my lists approaches the original Hebrew more closely than the Kana قانا of Robinson and Smith, though the places are probably identical.

The town of Achshaph and Hali, mentioned by Joshua¹ as belonging to Asher, may probably be found in Esh Shukíf and Hail; Madon² in Márón; the Meareh³ of the Sidonians in Maarekeh; Misrephoth-maim⁴ in Mezraah; Remmon-methoar⁵ and Haunathon in Kefr Rummán and Anáta; Janoah⁶, which the King of Assyria took, with Ijon, Abel-beth-Maacah, Kedesh, and Hazor, in Yanoah; Ijon Messrs. Robinson and Smith find in Merj Ayún, and Abel-beth-Maacbah in Abil el Hawa. Abel-maim⁷ may probably be identified with Abil el Kamh.

My friend the Rev. Mr. Thomson of Beyrút, suggested to me the examination of Húnín as the site of the great Hazor, so celebrated in the days of Joshua and subsequently. I am, however, inclined to think that Hazor lay farther east, and that its site is pointed out by a mound in the valley of the Jordan, between Hasbeia and Banias, called by the Arabs Tel Gházór جوزة الجوز. The sites of Aphek, Rehob, Ummah, Ramah, Hosah, Hebron, and Neiel—all cities of Asher—are still unfixed.

In the routes subjoined, the rate at which I travelled was about 2 miles an hour in the mountains, and about $2\frac{1}{4}$ to $3\frac{1}{4}$ along the coast. The variation of compass I found to be nearly 9° West.

No. I.—Route from Acre to Tyre.

N.B.—This route was travelled quicker than that from Tyre to Sidon.

	H. M.
By sea-side, plain bounded by hills to east.	
Jezzar's aqueduct crosses road, Munshiah on right - - - - -	0 20
Still along plain, near sea, cross rivulet, Jezzar's aqueduct on right - - - - -	0 30
Samariyeh, surrounded by gardens and fig orchards - - - - -	0 15
Foundations of ancient site, gardens - - - - -	0 15
Carried forward - - - - -	<hr/> 1 20

¹ Joshua xix. 25, 27.

² Joshua xi. 1.

³ Joshua xiii. 4.

⁴ Joshua xi. 8.

⁵ Joshua xix. 13, 14.

⁶ 2 Kings xv. 29.

⁷ 2 Chron. xvi. 4.

	H. M.
Brought forward - - -	1 20
Rivulet of El Mabshuk (Mafshur of maps), stone causeway, banks flat and swampy - - - - -	0 24
Ez Zib (Ecdippa), $\frac{1}{4}$ mile on left, near sea, springs, Hamsen on right - - - - -	0 36
Busseh, a mile on right, on flank of promontory - - - - -	0 46
Springs of Ain el Mesherfi, south of Ras en Nakureh, reef $\frac{1}{2}$ mile out at sea - - - - -	0 9
[From Acre to this the road has been across the mouth of a sandy plain, well cultivated with gardens, vineyards, and olive groves, and watered by rills from the hills, which bound it about two or three miles to eastward. These hills now bend down to the coast, forming the promontory of Ras en Nakureh, the natural and political boundary between Acre and Bellad Beshareh.]	
Ascent of Ras en Nakureh begins, steep - - - - -	0 9
[The sea has made a deep indentation on the chalky limestone face of the promontory—ascent steep.]	
Top of promontory; on left, precipice 100 feet high, washed by sea; mountains on right, clothed with dwarf evergreen oak; fine view of Tyre and Lebanon - - - - -	0 8
Bottom of first descent - - - - -	0 12
Descent more gradual to rivulet, crossed by old Roman bridge -	0 16
Bottom of second descent; puddingstone overlies limestone -	0 15
Khan and village of En Nakureh; village to right of road -	0 15
Along plain, near sea-side; traces of Roman road and aqueduct to the springs of Ain Iscandriyeh (Alexandroschenæ) -	1 10
[Here are massive foundations scattered round fine springs, over which a beehive-like stone structure has been raised, 12 feet high, and 16 paces in circumference; the remains of an arch and conduit stand close by; the water flows into a fountain below, from which it escapes in two miniature cascades; it bears the date $\mu\mu q$. A little beyond the ruins commences the ascent of Ras el Abiad (Promontorium Album).]	
Top of ascent, tower at top, Kalaat esh Shemmaa to right -	0 20
Bottom of descent, rock, chalky limestone, with flints near sea, overlaid with thin beds of puddingstone; dip of limestone 6° West - - - - -	0 12
Village of Mansureh to right; foundations of ancient site,	
Carried forward - - -	<hr/> 6 12

	M. M.
Brought forward - - -	6 12
called El Huminam (Sheberieh of maps); rivulet of Wadi et Tineh - - - - -	0 15
Hills recede, leaving a maritime plain, a mile broad - - -	0 26
[On left of road, remains of Roman aqueduct, and fine bridge; the latter had two arches; a portion of one is standing; its span $7\frac{1}{2}$ paces. The masonry extremely massive and solid, rubble encased with cut stones, all firmly cemented. The rivulet it crosses appears to have been anciently much larger than at present. Soil, fine dark vegetable mould.]	
Ras el Ain (Solomon's Pools) - - - - -	0 40
Over plain, cross rivulet of Solomon's Pools, and along sandy isthmus to Tyre - - - - -	1 0
Total - - - - -	<hr/> 8 33

General direction of course from Acre to Ras el Ain, N. 10° E.

Ditto ditto from Ras el Ain to Tyre, N. 15° W.

No. II.—*Route from Tyre to Sidon.*

Along north side of sandy isthmus to spring - - - -	0 33
Along maritime plain to Khan Kasimiyyeh, on left bank of Kasimiyyeh; cross river by stone bridge of one arch, modern; river 7 paces broad - - - - -	1 10
Along Phœnician plain to dry channel of rivulet, Abu el Aswad; ruins of small Roman bridge and Saracenic khan - -	1 0
Foundations and heaps of stones, called Kherbet Adlán - -	0 43

[In the adjacent rocks are sepulchral grotts, like the simpler description of grotts near Jerusalem, consisting generally of a rectangular chamber, 7 or 8 feet long, with a door on one side, and on the three others benches for sarcophagi, or sepulchral niches and soroi. Adlán is supposed to be the site of Ornithopolis.]

Dry bed of stream - - - - - 0 48
 Khan El Khudr and Wali - - - - - 0 25

[Near sea-shore, a little to north, are foundations and heaps of stones, among which are some fragments of columns. On the right, on the side of the hills, stands the modern village of Surañend: the foundations below are supposed to mark the site of the Sarepta of the New Testament and Zarephath of the Old.]

Carried forward = = 4.39

	H. M.
Brought forward - - - - -	4 39
Along plain, near sea-shore, to Ain Kantereħ springs - - - - -	0 23
Along plain, near sea-shore, to Ain el Burák, khan, springs, and gardens - - - - -	0 45
Forded Nahr ez Zahrani, 1 foot deep, 75 paces broad - - - - -	0 28
Forded Nahr es Sanik, dry—a khan and guard-house - - - - -	1 10
Prostrate Roman mile-stone, with Latin inscription, bearing names of Severus and Pertinax, copied by Maundrell - - - - -	0 5
Pass Ain el Ghannim, streamlet of El Burghut, through luxuriant gardens, to Sidon - - - - -	0 30
Total - - - - -	<hr/> 8 0

General direction of course from Tyre to Khan Kasimiyeħ, N. 59° E.
 Ditto ditto from Khan Kasimiyeħ to Sidon, N. 7° E.

No. III.—*Route from Tyre to Banias.*

Along sandy isthmus to village of Maashuk - - - - -	0 20
Ascend hills to village and tower of El Burj - - - - -	0 25
Maasereħ on plateau, covered with dark soil; Chernaye on left, Hiran and Baal on right - - - - -	0 25
Descend into Wadi Bir Lahmeh, village of Bazurieħ a mile on right - - - - -	0 14
Bottom of descent - - - - -	0 5
Up Wadi Bir Lahmeh, which opens into wide valley of Yanoah; Wadi Jilu branches off to south-east to Ain Maarekeh; near top of wadi, on left, valley covered with fig-trees, vine-yards, and orange-groves; spring - - - - -	0 29
Top of Wadi Yanoah - - - - -	0 5
Along mountain side, Wadi Berish on left, spring of Ain Berish at the bottom of wadi, village of Berish on opposite side of valley - - - - -	0 25
Descend to left into Wadi Busflye, wheat and fig cultivation - - - - -	0 24
Village of Busflye - - - - -	0 10
Castle of Maron on hill - - - - -	0 50

Bearings from Castle of Maron.

Terherfa - - - - -	S. $\frac{1}{2}$ mile apparent distance.
Súlah - - - - -	W. $21\frac{1}{2}^{\circ}$ S., on hill, $2\frac{1}{2}$ miles ditto.
Mt. Hermon (Gebel Sheikh) E. 17° N.	
Nafúkhich - - - - -	W. 40° N., 2 miles.
Carried forward - - - - -	<hr/> 3 52

	H. M.
Brought forward - - - - -	3 52
Hence ascend Wadi Buflye or Maron to table-land, wadi well cultivated; village of Etweiri on left $\frac{1}{2}$ a mile, and 3 miles farther, in same direction, Afrún - - - - -	0 15
Tulin, $1\frac{1}{2}$ mile on right, in Wadi Khirbet Selim; and beyond rises in distance the Castle of Tibnin; east of Tibnin, on same elevated land, lie the villages of Abrilla and Merkaba. Here is the watershed between sea and valley of Jordan - - - - -	0 9
Descend from plateau into Wadi el Ujayer; Aiddib a mile to right, near commencement of wadi - - - - -	0 11
Ain Aiddib, spring at bottom of wadi, which runs north-easterly towards the Litani gorge; descend through oak forest to Wadi el Ujayer - - - - -	0 11
Ujayer brook at bottom of wadi, clear and rapid, 4 paces broad, 6 inches deep, runs to Litani; crossed to east or right bank; its source is said to lie about $1\frac{1}{2}$ hour up the wadi, to the south-west; ascend to top of pass; open plateau studded with olive trees, wheat cultivation; hence Castle of Shukif bears E. 40° N. - - - - -	0 55
Plateau; Tarbi $\frac{1}{4}$ mile to left; Tolusa 1 mile to right - - - - -	0 26
Merkaba on right, 2 miles - - - - -	0 19
Descend into valley, running south-west, well wooded and cultivated; on descent, a rude tomb, like a cromlech - - - - -	0 20
Encampment in middle of valley - - - - -	0 15
Up opposite side of valley to Adeish - - - - -	0 15
Top of pass, and commencement of descent towards valley of the Jordan, or Hasbeia River; Wadi et Teim - - - - -	0 9
Aintulli on left - - - - -	0 36
Abil el Kamh, on saddle of hill to left, across defile—apparent direct distance 1 mile - - - - -	0 24
Bottom of descent into valley of Jordan; copious springs form a rivulet, which runs to the Huleh Lake - - - - -	0 5
Across valley of Jordan; cross Zuk rivulet, running southerly, by stone bridge of one pointed arch; brook, 6 paces wide, 2 feet deep, clear and rapid, bed basalt, soil coffee-coloured; oleander, willow, and wild raspberry on banks; foundations of ancient site on right, and of a more modern village - - - - -	0 35
Carried forward - - - - -	<hr/> 8 57

	H. M.
Brought forward - - - - -	8 57
Cross marshy and grass-covered flat to Jordan, or River of Hasbeia, 30 paces broad, and from 2 to 4 feet deep, clear and rapid; solid stone bridge of 3 arches, 65 paces long, and 4 paces broad - - - - -	0 50
[The river here flows in a crevasse of basalt, with precipitous sides, from 15 to 60 feet high, and 70 paces wide; the bottom marshy, and shaded with willow, raspberry, oleander, and oriental plane. A little above the bridge the river falls over a ledge of basalt, about 2 feet high.]	
Cross rivulet - - - - -	0 28
Tel el Kadi - - - - -	0 15
Banias - - - - -	0 45
Total - - - - -	<u>11 15</u>

The general direction of the route from Tyre to the top of the ridge overlooking the Jordan, or Hasbeia River, was about nearly east; and thence to the town of Banias about E. 22° S. The course in the mountains tortuous.

No. IV.—*Route from Hasbeia to Castle of Shukif.*

Down rugged channel of stream to bridge of Zuk, over Hasbeia River; bridge 2 if not 3 arches, 45 paces long, 3 paces broad; stream 16 paces broad, 1 foot deep; above bridge turned off by stone Anicut to turn a mill; limestone	- 0 20
From bridge ascend hills to bitumen pits, Biar el Hommar	- 0 12
Descend to road by village of Kokaba	- 0 15
Ascent to Merj el Ayún, limestone, rich red soil, vineyards; Abil el Hawa 1 mile to left	- 0 15
Cross vine-covered Merj el Ayún to top of low ridge on south-western side	- 0 47
Short descent and ascent to Jedeidah, in Wadi Merj el Khiyam, $\frac{1}{2}$ mile on left; on right is Dibbin and Khiyam, and beyond lies Belát	- 0 22
Along ridge of limestone; below in valley, on left, Tel Derdera Ulieh, on south-eastern brink of Litáni gorge; Castle of Shukif bears W. 16° S.	- 0 6 0 45
Carried forward	<u>3 2</u>

	H. M.
Brought forward - - -	3 2
Down deep gorge to Litáni at bottom, crossed by Bridge of Kherdeli - - - - -	0 48
Up opposite steep bank, by circuitous route to north to village of Arnún, whence the castle bears S. 20° E., about a mile off	1 0
Total - - - - -	<u>4 48</u>

Bearings from Castle of Shukif.

Castle of Banias - - -	E. 31° S.
Nabatíeh el Foká - - -	N. 30° W.
Shukín - - -	N. 58° W.
Arnún - - -	N. 20° W.
Birket el Kebír - - -	N. 35° W.
Deir Mimias - - -	N. apparent distance 2 miles.
Myfedún - - -	W. 10° N.

The general direction of course from Hasbeia to the bridge nearly W.; thence to Bjar el Hommar W. by S.; thence to the road S. E.; and thence, up ridge and across Merj el Ayún to Ulieh, about S.W. The direct distance across the gorge from Ulieh to the Castle of Shukif may be about 1½ mile: the castle bears, as before said, W. 16° S. from ridge of Ulieh.

No. V.—Route from Castle of Shukif to Sidon.

Over partially cultivated limestone plateau to rain-water pond of Birket el Kebir, 180 paces in circumference; Keff Tibnit ¼ mile to right - - - - -	0 35
Pass Nabatíeh el Foka, on hill close to left of road; large village, whitè tombs - - - - -	0 25
Down Wadi Nabatíeh to Nabatíeh et Tahta - - - - -	0 22
Down Wadi Nabatíeh; wadi narrows, becomes clothed with low oak forest, and flanked by round hills of limestone to Ziptieh on left; Deir ez Zahraní and Wadi Zahraní to right - - - - -	2 37
Khan Mahomed Ali - - - - -	0 38
Down south side of Wadi Zahraní to opposite Aktenib, on opposite side - - - - -	0 51
Spring of Ain Aktenib; a little below crossed Zahraní rivulet at bottom of wadi, shaded by a profusion of oleanders in flower and plane trees; stream clear and shallow - - - - -	0 15
Carried forward - - - - -	<u>5 43</u>
2 B	

	Brought forward - - - - -	H. M.
Ascend opposite side of wadi to table-land; wheat cultivation -	- 0 22	
Ghazieh on ridge, to right; hence Sidon bears N. 15° E. -	- 0 13	
Gentle descent down mountain side; cross Ghazieh rivulet -	- 0 23	
Cross Sanik stream - - - - -	- 0 45	
Cross Burghut rivulet to Sidon - - - - -	- 0 35	
Total - - - - -	8 1	

The general direction of the course to Nabatieh el Foká was N. 30° W.; thence to Ziptieh about N. 10° W.; from Ziptieh to the opposite side of the Zahráni valley about W. by N.; and thence to Sidon N. 15° E.

DISTRICT OF BELLAD BESHAREH بلاد بيشاره.

Villages on the Coast.

M., C ^l .	Abbásíyeh - - - - -	عَبَاسِيَّة
M.	Terdabbá - - - - -	طَرْدَبَا
M.	Juárd en Nakhl - - - - -	جُوارِد النَّخْل
M., C.	Ghazieh - - - - -	غَزِيَّة
	Hamádíeh - - - - -	حَمَادِيَّة
M.	Shádáníeh - - - - -	شَادَانِيَّة
M.	Bázúrieh - - - - -	بَازُورِيَّة
M.	Ghanni Bakkál - - - - -	غَنْيٌ بَقَال
M.	Hannáwíyeh - - - - -	حَنَاوِيَّة
M.	Burj Abbás - - - - -	بُرج عَبَاس
M.	Burj el Kílib - - - - -	بُرج الْقِيلِب
M.	Ismáíd - - - - -	إِسْمَاعِيد
M.	Beít Ulíeh - - - - -	بَيْت أُولِيَّة
M.	El Felláwíyeh - - - - -	الْفَلَوِيَّة

¹ The capital letters before the names of places show the character of the population. See p. 353.

M.	Biyút es Synd	- - - -	بيوت السيد
M.	Nákúreh	- - - -	ناقرة
M.	Iskanderúná	- - - -	اسكندرونا
M.	Hámúl	- - - -	حامول
M.	Kharábat Dizzíyeh	- - - -	خرابت دزيعه
M.	Dizzíyeh	- - - -	دزيعه
	Maashúk	- - - -	معشوّق

MERJ AYUN مرج عيون.

C.	Abil el Kamh	- - - -	أبل القمح
D., C.	Abil el Hawá	- - - -	أبل الهوا
C., M.	El Jedeideh	- - - -	الجديدة
C.	Buweidhch	- - - -	بوعيده
D., C.	Matalleh	- - - -	مطلاه
D.	Sardá	- - - -	سردا
M.	Kefr Kílí	- - - -	كفر كيلي
M., C.	El Khíyám	- - - -	الخيام
M.	Belát	- - - -	بلاد
C.	Deir Mímás	- - - -	دير ميماس
C.	El Khirbeh	- - - -	الخربه
C., M.	Debín	- - - -	ديبن
M.	Houzá	- - - -	حوزا
	El Kulláh	- - - -	القليبة

Villages in the Mountains.

	Merkabah	- - - -	مركبه
C., M.	Kánch	- - - -	قانه
M.	Átit	- - - -	عثيت

M.	Dabaár	-	-	-	-	دُبَار
C.	Nafákhíeh	-	-	-	-	نَفَاخِيَه
M.	Daklíh	-	-	-	-	دَقْلِيَه
M.	Shákhúr	-	-	-	-	شَاخُور
M.	Burj Kalawíeh	-	-	-	-	بُرْج قَلْوِيه
M..	Burj Rihál	-	-	-	-	بُرْج رِحَال
M.	Báklíd	-	-	-	-	بَاقْلِيد
M.	Yátin	-	-	-	-	يَاطِين
M., C.	Bint Jebail	-	-	-	-	بَنْت جَبِيل
	Rumásh	-	-	-	-	رُمَاش
M.	Yárón	-	-	-	-	يَارُون
M., C.	Márón	-	-	-	-	مَارُون
M.	Zibghín	-	-	-	-	زِبْغِين
M.	Atá	-	-	-	-	عَتَّا
M.	Mijdel	-	-	-	-	مِجَدَل
M.	Shíhín	-	-	-	-	شِيكِين
M.	Terharfá	-	-	-	-	طَرْحَرْفَا
A., M.	Hadáná	-	-	-	-	حَدَانَا
A.	Ahríneh	-	-	-	-	أَحْرِينَه
	Mezraah	-	-	-	-	مَزْرَعَه
	Biyádh	-	-	-	-	بِيَاض
	Hadíth	-	-	-	-	حَدِيث
	Makhshikah	-	-	-	-	مَخْشِكَه
	Húnín	-	-	-	-	حُونِين
	Tibnín	-	-	-	-	تِبْنِين
M.	Anáteh	-	-	-	-	عَنَاتَه
C., M., & Mar.	Ain Nebl	-	-	-	-	عَيْن نَبْل

M.	Húleh -	- - - - -	حولة
M.	Hadáteh -	- - - - -	حداتع
	Meis -	- - - - -	ميس
	Bírish -	- - - - -	بيرش
M.	Azwezún -	- - - - -	ازوزون
	Kalnat Márón -	- - - - -	قلعة مارون
	Maarekah -	- - - - -	معرakah
	Súlah -	- - - - -	سوله
	Túlin -	- - - - -	طولين
	Antará -	- - - - -	انتارا

DISTRICT OF BELLAD SHUKIF بلاد الشقيف.

Villages on or near the Coast.

M.	Ziftáh -	- - - - -	زقيبة
M., C.	Basfúr -	- - - - -	بصفور
M.	Sarfend -	- - - - -	صرفتند
M., C.	Ansár -	- - - - -	انصار
M.	Kalaat Meis -	- - - - -	قلعة ميس
M.	Ez Zeríwích -	- - - - -	الزريوبيه
M., C.	Majeidileh -	- - - - -	مجيدله
M.	El Wasmát -	- - - - -	الوسمات
M.	Tibshá -	- - - - -	تبسا
C.	El Dáwadíeh -	- - - - -	الداوديه
M.	Bábalích -	- - - - -	بابليه
M.	Kákabah Shaníbar -	- - - - -	قاتحبه شنبير

Villages in the Mountains.

M.	Edzebíeh	-	-	-	-	الدضبيبة
M.	Athbá -	-	-	-	-	عثبا
M.	Damúl	-	-	-	-	دمول
M.	Kefr Tibnít -	-	-	-	-	كفر تبنيت
M.	Yahmúr	-	-	-	-	يُحْمُر
M.	Adshít	-	-	-	-	عدشيت
	El Biádh	-	-	-	-	البياض
	Sherkíeh	-	-	-	-	شرقية
	Shílá Baal	-	-	-	-	شيلبا بعل
	Deir ez Zahráni	-	-	-	-	دير الزهراني
	Dawír -	-	-	-	-	دوير
	Zibdín	-	-	-	-	زبدین
	Kefr Rammán	-	-	-	-	كفر رَمَان
	Kefr Heil	-	-	-	-	كفر حيل
	Jabbúsh	-	-	-	-	جبوش
	Myfedún	-	-	-	-	ميغدون
M., C.	Nabátíeh et Tahtá	-	-	-	-	نباطية التحتا
M.	„ el Fóká -	-	-	-	-	نباطية الغوقة
	El Hamrah -	-	-	-	-	الحمراء
	Zótir el Gharbíeh	-	-	-	-	زوتر الغربية
	„ esh Sharkíeh	-	-	-	-	زوتر الشرقية
	Jabshít	-	-	-	-	جبشيت
	El Kafúr	-	-	-	-	الكافور
	Túl -	-	-	-	-	تول
	Yánóah	-	-	-	-	يانوح

	Hárduf	-	-	-	-	جارُدُف
	Deir Nughlah	-	-	-	-	دير نُغْلَه
	El Kákaba el Jesr	-	-	-	-	القاقعَبَدُ الجِسْرُ
M.	Arnún	-	-	-	-	أَرْنُون
	Nusf Tamrah	-	-	-	-	نُصْفُ تَمْرَةٍ
	Shókín	-	-	-	-	شُوكَين
	Kefr Józ	-	-	-	-	كَفْرُ جُوزٍ
